



Legislative Audit Division

State of Montana

Report to the Legislature

July 2007

Performance Audit

Prioritizing Forest Fuels Reduction Projects

Department of Natural Resources and Conservation (DNRC)

DNRC has a process for prioritizing fuels reduction projects throughout the state resulting in federal grants of over \$9.3 million to local fuels reduction projects. Policy changes at the federal level will require DNRC to change its current prioritization process if it is to remain competitive with other states vying for the same federal fuels reduction funds.

This report provides a recommendation for determining where limited funding resources should be focused to achieve the greatest reduction in risk of catastrophic wildfires. We recommend DNRC develop criteria to coordinate and fund statewide fuels reduction activities that:

- Focus efforts in areas of greatest risk as identified in regional and statewide fuels assessments.
- Incorporate the use of local land-use planning practices and in-house information.
- Require consistency of locally supplied fuels information.

Direct comments/inquiries to:
Legislative Audit Division
Room 160, State Capitol
PO Box 201705
Helena MT 59620-1705

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July 2007

The Legislative Audit Committee
of the Montana State Legislature:

This is our performance audit of the Montana Department of Natural Resources and Conservation's (DNRC) role in forest fuels reduction activities.

This report contains a recommendation for improving current processes. A response from DNRC is contained at the end of the report.

We wish to express our appreciation to the staff of DNRC, the U.S. Forest Service, U.S. Bureau of Land Management, and local governments for their cooperation and assistance.

Respectfully submitted,

/s/ Scott A. Seecat

Scott A. Seecat
Legislative Auditor

Legislative Audit Division

Performance Audit

Prioritizing Forest Fuels Reduction Projects

Department of Natural Resources and Conservation

Members of the audit staff involved in this audit were Steve Erb and Joe Murray.

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Appointed and Administrative Officials

Department of Natural Resources and Conservation

Mary Sexton, Director

Bob Harrington, Administrator, Forestry Division

Tom Schultz, Administrator, Trust Land Management Division

Ted Mead, Chief, Fire and Aviation Bureau

Paula Rosenthal, National Fire Plan Coordinator,
OG21
Fire and Aviation Bureau

Prioritizing Forest Fuels Reduction Projects

DNRC's process for prioritizing fuels reduction projects can be improved.

Audit Findings

Hazardous fuel levels exist in Montana's national forests, state trust lands, and private forests. These hazards have occurred due to a number of factors including drought, past forest management and fire suppression policies, and increased development in the wildland/urban interface. Reducing hazardous fuel levels involves all levels of government and all types of landowners.

The Department of Natural Resources and Conservation (DNRC) is responsible for protecting Montana's resources from wildfires. It accomplishes this task by supporting fuels reduction activities on state and privately owned lands, managing state trust lands, and ensuring compliance with the Hazard Reduction Act. The federal government is the primary source of funding for fuels reduction projects. DNRC assists local governments and private landowners in acquiring federal grant funds by prioritizing projects and actually awarding the funds. Between 2002 and 2007, fuels reduction projects on non-federal lands have received more than \$9.3 million from federal grants. However, future federal funding availability for fuels reduction grants is uncertain due to increasing pressure from other federal priorities. This has raised concerns about the availability of funding for local fuels reduction projects in Montana. In addition, recent criticisms from the General Accountability Office and the U.S. Department of Agriculture's Inspector General have led to changes in federal fuels reduction policy. Federal policy now requires the highest risk projects be funded. These changes will result in more competition between states for limited amounts of federal funding to reduce forest fuels.

We have identified two major improvements DNRC can make to its existing process to improve opportunities for federal funding to support Montana fuels reduction projects. These include:

- ▶ Developing a regional and statewide assessment of hazardous fuel levels.
- ▶ Increasing the use of available information to more effectively prioritize fuels reduction programs.

These changes will allow DNRC to more effectively identify areas of high risk and focus limited federal funding to reduce these risks. This will improve DNRC's prioritization process from one that spreads funding throughout the state to one which focuses on those areas of highest risk from wildfire.

Audit Recommendations

To improve DNRC processes, we recommend DNRC develop criteria to coordinate and fund statewide fuels reduction activities that:

- ▶ Focus efforts in areas of greatest risk as identified in regional and statewide fuels assessments.
- ▶ Incorporate the use of local land-use planning practices and in-house information.
- ▶ Require greater consistency of locally supplied fuels information.

Chapter I – Introduction

Introduction

Hazardous fuel levels in Montana’s forests, consisting of dry brush and forest vegetation, create a threat for uncharacteristically severe wildfires. This threat exists in Montana’s national forests, Montana’s state trust lands, and private forests. To reduce these hazardous fuel levels the Department of Natural Resources and Conservation (DNRC), the federal government, county and city governments, and private landowners are participating in a variety of fuels reduction activities. Our 2004 audit of DNRC’s wildfire administration (04P-11) identified hazardous fuel levels as a significant factor in catastrophic wildfires. As a result, the Legislative Audit Committee requested a review of DNRC’s role in the state’s fuels reduction activities. This audit report identifies how DNRC can improve existing practices to more effectively coordinate and plan fuels reduction activities among the various stakeholders and maximize federal funding opportunities.

Audit Objectives

We developed the following audit objectives:

1. Identify DNRC’s current role in prioritizing and selecting fuels reduction activities throughout Montana.
2. Determine if DNRC can increase the overall effectiveness of funding fuels reduction activities in the face of changes in federal fuels reduction policy.

Audit Scope and Methodology

To address the audit objectives, we completed the following:

- ▶ Reviewed current state law.
- ▶ Reviewed legislation proposed to the 2007 Legislature arising from House Joint Resolution 10.
- ▶ Interviewed DNRC area land managers, state trust land management, fuels reduction program management, and biomass utilization program management.
- ▶ Interviewed local government officials from Butte-Silver Bow, Lewis and Clark, and Sweet Grass counties.
- ▶ Interviewed federal officials from Helena National Forest, Lolo National Forest, Flathead National Forest, U.S. Forest Service Region 1, and U.S. Bureau of Land Management.
- ▶ Reviewed DNRC grant approval and prioritization procedures.

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- ▶ Reviewed fuels reduction grant awards between 2002 and 2007.
- ▶ Reviewed research on Montana’s wood use industry produced by the University of Montana Bureau of Business and Economic Research.
- ▶ Reviewed current and previous federal fuels reduction policy reports for comparison with DNRC activities.
- ▶ Reviewed 22 current Community Wildfire Protection Plans and Hazard Mitigation Plans.
- ▶ Reviewed the Statewide All-Hazard Plan.
- ▶ Reviewed procedures used by the Montana Department of Agriculture to implement/prioritize a statewide noxious weed mitigation plan.
- ▶ Reviewed other states fuels reduction practices.

Report Overview

The remainder of this report addresses our audit objectives in the following manner:

- ▶ Chapter II identifies causes of current wildland fuels conditions, DNRC organization, fuels reduction funding resources, and current federal fuels reduction policy.
- ▶ Chapter III discusses DNRC accomplishments related to fuels reductions, actions DNRC can take to improve the effectiveness of Montana’s fuels reduction activities, and how DNRC can improve opportunities to secure future federal funding support.

Chapter II –The Fuels Reduction Environment in Montana

Introduction

This chapter discusses the Department of Natural Resources and Conservation's (DNRC) role in prioritizing and selecting fuels reduction activities completed throughout the state. The chapter also identifies the major sources of funding to support fuels reduction activities. Current wildland fuel conditions are the result of federal fire suppression policy, drought, and human development into forested and wild areas. The following sections discuss each of these issues.

Past Fire Suppression Policy

Over the last 100 years, federal and state policy to suppress wildfire significantly reduced wildfire from national and state forests. Before this policy was put in place, an average of 25 million acres of the nation's forests burned each year. These fires maintained the existing fire-adapted ecosystem and removed excess fuels without causing uncharacteristically hot wildfires. This fire suppression policy resulted in hazardous fuel levels in national and state forests. Increased fuels are a significant factor in causing today's wildfires to burn more severely than historical fires and with greater environmental impacts. The following figure provides three snapshots in time illustrating how fuel levels have changed.

Chapter II – The Fuels Reduction Environment in Montana

Figure 1

Change in Forest Conditions

Bitterroot National Forest



1895



1980



2001

Source: U.S. Department of Interior/Agriculture report.

In the first photograph, forest conditions were created by regularly occurring, low-intensity surface burning. The forest was dominated

Chapter II – The Fuels Reduction Environment in Montana

primarily by fire-tolerant ponderosa pines. In the second photograph, the forest is characterized by dense thickets of fire-intolerant tree species. During droughts, the thick vegetation stresses the forest and predisposes it to insect infestations, forest diseases, and undesirable wildland fires. In the final photograph, taken in the aftermath of the 2000 fire season, the forest was severely damaged with few trees remaining. The house was removed from the site prior to the fires.

Following the wildfires of 2000, the federal government recognized past fire policy resulted in bigger and more severe wildfires. Between 1960 and 1999, wildfires consumed an annual average of 3.8 million acres. However, between 2000 and 2006, the average jumped to more than 6.9 million acres burned annually.

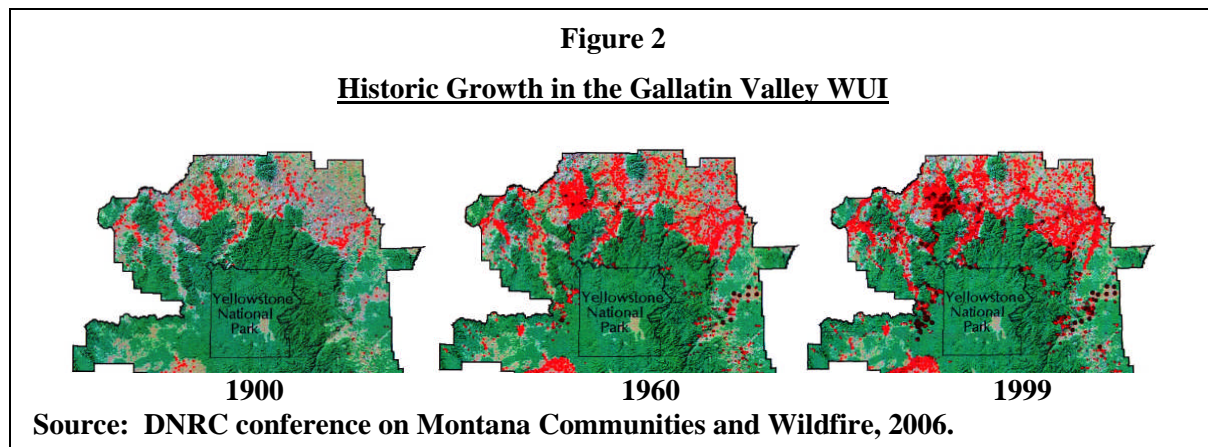
Affects of Drought

Drought and weather conditions contribute significantly to fuel loading and severe fire conditions. According to federal reports, there is a clear relationship between drought and fire season severity. The combination of increased fuel buildup, drought, and warmer temperatures will cause fires to increase in size and severity. Much of western and southwestern Montana's forested lands exhibit conditions of moderate to high risk for severe wildfires.

Movement into the Wildland Urban Interface

The Wildland Urban Interface (WUI) is the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuel. According to federal reports, 60 percent (8.4 million) of new homes constructed in the United States in the 1990s were located in the WUI. Montana experienced similar growth in its WUI. For example, Figure 2 illustrates growth in the WUI in the Gallatin Valley. Similar growth patterns exist in the Bitterroot, Missoula, Kalispell, and Helena valleys.

Chapter II – The Fuels Reduction Environment in Montana



Each of the red dots in the figure above represents a cluster of buildings. As the figure shows, the number of buildings in the region increased as more development occurred.

The WUI Affects Fuels Reduction and Fire Suppression Activities

There are two primary affects associated with growth of the WUI and wildland fire. First, as communities expand into the WUI, development occurs in areas with increased fuel levels brought about by past fire suppression policies. Development in areas with hazardous fuel levels increases the risk to life and property from wildfires. Second, growth in the WUI complicates fuels reduction activities and fire suppression options, primarily by limiting the types of activities carried out near homes and people. For example, under controlled conditions, fire itself can be used as a low-cost method of reducing excess fuels. However, smoke from fire can be unhealthy to some and the potential of a controlled fire escaping and destroying local structures is always a possibility. When a wildfire enters the WUI, fire costs increase significantly as structure protection assumes a greater role in fire suppression tactics. For example, in 2000, the Skalkaho Fire in the Bitterroot National Forest covered 64,000 acres, a large portion of it burned in the WUI. Structure protection and fire suppression required 755 firefighters and cost \$7.2 million. In contrast, a fire in the Selway-Bitterroot Wilderness Area, outside the WUI, burned 63,000 acres but only required 25 firefighters and cost \$700,000 to contain.

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DNRC is Responsible for Ensuring Suppression of Wildfires

Montana statutes assign DNRC responsibility for protecting Montana's resources from wildfires. Specifically, sections 76-11-101 and 102, MCA, require DNRC to adopt rules to protect the natural resources of the state from destruction by fire and enter into cooperative agreements with landowners and lessees for fire protection and conservation. DNRC meets these requirements by maintaining an extensive suppression capability and supporting wildfire prevention programs.

DNRC Organization

DNRC is organized into seven divisions. Hazardous fuel levels and wildfires directly affect two of those divisions: Trust Land Management and Forestry. Field operations are located in six area offices throughout the state, and carry out duties assigned by both the Trust Land Management and Forestry Divisions.

Trust Land Management Division

The Trust Land Management Division provides management of state-owned lands (trust lands) to provide funding to a variety of recipients, primarily the state's schools. Timber sales from state lands generate some of this funding. The division's management responsibilities and fuels reduction activities include:

- ▶ Nearly 5.2 million acres of trust lands.
- ▶ Trust land timber sales accounting for approximately 12 percent of trust fund revenues.
- ▶ Fuels reduction on trust lands is limited to activities in conjunction with timber harvests with no direct funding provided.
- ▶ Timber sales have been conducted to support fuels reduction activities on adjacent non-trust forest lands.
- ▶ Seasonal fire crews can conduct fuels reduction activities as part of training.

Forestry Division

The Forestry Division is responsible for ensuring the sustainability of Montana's forest lands, rural lands, and communities. The division accomplishes this responsibility through wildland fire prevention and suppression activities and interacting with local governments and citizens to improve forest management and promote the viability of

Chapter II – The Fuels Reduction Environment in Montana

forest-based economies. The Fire and Aviation Management Bureau (FAMB) and Service Forestry Bureau conduct most of the division's forestry responsibilities.

Fire and Aviation Management Bureau

FAMB is responsible for prevention and suppression of wildland fires on approximately 50 million acres of state, federal, and private land. FAMB responsibilities include:

- ▶ Providing fire prevention education through the Keep Montana Green Program and homeowner education through the Firewise Program.
- ▶ Providing informational and organizational support to local government and private citizen applications for federal fuels reduction funding with one full-time employee.
- ▶ Conducting fire suppression activities once wildland fires occur.

Service Forestry Bureau

The Service Forestry Bureau works to improve forest health and encourage use of forest products. Responsibilities include:

- ▶ Promoting forest stewardship by assisting non-industrial private forest (NIPF) landowners in acquiring personal knowledge about their forest resources and developing and implementing a forest management plan for their property. The stewardship program developed a software-based tool to evaluate locations for inclusion in the stewardship program.
- ▶ Assisting NIPF landowners and others in identifying and managing forest insects and diseases.
- ▶ Promoting the use of forest biomass as an energy source for heating schools and other public facilities, known as the Fuels for Schools Program.
- ▶ Monitoring compliance of Hazard Reduction Act (HRA) requirements for reducing logging residues resulting from commercial logging operations to lower the threat of wildland fires.

Fuels Reduction Funding Resources

There is little disagreement that hazardous fuel levels increase the risk of severe wildfires. Increased movement into the WUI places more social, economic, and personal values at risk from wildfires. The cost to remove hazardous fuels and the amount of material to remove from the forests are significant obstacles to achieving fuels

Chapter II – The Fuels Reduction Environment in Montana

reduction. There are no good estimates about the number of acres within Montana requiring fuels reduction. However, the costs to reduce these fuels from the WUI range from \$60 to \$4,000 per acre depending on a variety of conditions. There are a number of options available to offset these costs to include federal grants and commercial sale of fuels removed from forested areas.

Program Funding

The federal government is the primary source of funding available to state and local governments and individual landowners to remove or reduce hazardous fuels. National Fire Plan appropriations support two federal funding mechanisms: Western States WUI Grants and Community Protection Fuels Mitigation Grants (Community Protection Grants). Both grants require local governments to provide a funding match. This match can be cash, “in-kind” services, or a combination of both. The following table provides a summary of grant funding received by Montana since 2002.

Table 1
Federal Funding to Montana

Year	Western States Grants	Community Protection Grants
2002	\$618,500	No funding available
2003	\$1,129,475	\$716,843
2004	\$3,125,157	\$1,104,873
2005	\$119,200	\$444,680
2006	\$600,000	\$306,000
2007	\$1,200,000	Not yet announced
Total	\$6,792,332	\$2,572,396

Source: Compiled by the Legislative Audit Division from DNRC records.

Western States WUI Grants

The U.S. Department of the Interior (DOI) divides the United States and its territories into three regions. The western states region is composed of 17 states and territories and is the largest of the regions. DOI provides grant funding for each region and awards within each region are made through competitive grants.

Chapter II – The Fuels Reduction Environment in Montana

Western states grants are available for fuels reduction projects on government and private lands. DNRC prioritizes funding applications and then forwards those priorities to DOI for final award. DNRC uses a committee of DNRC, U.S. Forest Service, and wildland fire organizations to set priorities, guided by a self-generated scoring system. After award is made, DNRC monitors progress on the project for DOI.

Because of the competitive nature of the award, applicants state it is difficult to rely on Western States Grant funding to carry multi-phased projects through to completion without access to other funding sources. For example, the Bitterroot Resource and Conservation District (RCD) received nearly \$1 million for fuels reduction activities in 2004 but failed to receive additional funding through this grant until 2007, even though applications for subsequent funding were made in both 2005 and 2006.

Funding awards from this grant also tend to correspond to the severity of the previous wildfire season. For example, following the 2003 wildfire season where more than 730,000 acres burned, Montana fuels reduction projects received more than \$3.1 million. However, in 2004, only 18,000 acres burned and Montana projects received \$119,200. Regardless of fluctuations in total funding available from year to year, Western States Grants have provided nearly \$6.8 million in support of Montana fuels reduction projects since 2002. Twenty-six fuels reduction projects were funded through Western States Grants, resulting in 7,498 acres treated.

Community Protection Fuels Mitigation Grants

A second source of federal funding is available through Community Protection Fuels Mitigation Grants. There are a number of key differences between Community Protection Grants and Western States Grants. First, these grants are only available to local government sponsored projects on non-federal lands. Second, DNRC receives this grant funding directly from the federal government and DNRC is responsible for setting priorities and subgranting to local entities. Third, grant funding must support a local fuels reduction project adjacent to a similar federal fuels reduction project. Fourth,

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Montana fuels reduction projects are not required to compete against other states' projects for funding. Fifth, grant awards tend to be smaller with more projects receiving funding under the Community Protection Grant Program.

An advantage of Community Protection Grants is they can provide more reliable funding for prioritizing projects from year to year to local governments because DNRC is the awarding authority. For example, the Bitterroot RCD received funding in 2003, 2004, 2005, and 2006 for successive fuels reduction projects. Since 2002, 18 projects have been funded in 10 communities resulting in 3,795 acres treated.

Non-Profit Activities Result in Secondary Fuels Reduction Benefits

Non-profit organizations also fund activities resulting in fuels reduction. For example, the Rocky Mountain Elk Foundation provides funding to landowners to improve wildlife habitat through land stewardship activities. A benefit of habitat improvement is fuels reduction because it removes excess trees and brush. Other groups, such as the Sierra Club, have members participate in fuels reduction projects, with labor being an "in-kind" match to meet federal funding requirements.

Changing Federal Fuels Reduction Funding Policy

Federal fuels reduction funding is under increasing pressure from other federal priorities. Federal fuels managers we spoke with stated the Forest Service reallocated unobligated funds to other executive agencies. The Government Accountability Office and the Department of Agriculture's Inspector General criticized federal fuels reduction policy because it was not focused on areas of highest risk resulting from policy design weaknesses. To address funding concerns and respond to criticisms about fuels reduction policy, the Departments of Agriculture and the Interior recently issued two joint statements. The first was the Quadrennial Fire and Fuels Review (QFFR) in June 2005. The second was Protecting People and Natural Resources: A Cohesive Fuels Treatment Strategy in February 2006.

Quadrennial Fire and Fuels Review

The QFFR was undertaken to link federal budget conditions with changing environmental conditions and develop a strategic vision for

Chapter II – The Fuels Reduction Environment in Montana

federal wildfire management. There are four key concepts creating the foundation of this strategic vision. First, future funding for wildfire and fuel management will likely remain at current levels. Second, fuels are growing faster than they can be treated. Third, planning, decision-making, and priority-setting capabilities must be strengthened. Fourth, state and local governments must take a greater role in establishing fire-safe environments.

Cohesive Fuels Treatment Strategy

The Cohesive Fuels Treatment Strategy (CFTS) sets priorities for federal fuels reduction funding and provides guidance on conditions to be met for funding. First, priority will be given to projects within the WUI. However, this funding will be based on local community participation and commitment to reducing wildfire risk. Second, treatments outside the WUI will be focused on those areas with the greatest risk to communities or vital resources. To achieve these priorities, the CFTS emphasizes the need to strategically plan fuels reduction activities. Strategically planning fuels reduction activities is important because there is insufficient funding available to eliminate all hazardous fuels and available funding must be directed to the areas of highest need.

Conclusion: Federal Funding and Expectations are Changing

Federal policy acknowledges:

- 1. Funding is not available to eliminate all hazardous fuels.**
- 2. Priorities must be established to strategically plan fuels reduction activities targeting those areas at greatest risk.**

Chapter III – How Can DNRC Improve on What it is Already Doing?

Introduction

This chapter discusses the Department of Natural Resources and Conservation's (DNRC) process for funding fuels reduction projects around the state. It provides information on DNRC and local government accomplishments at reducing forest fuels and outlines how DNRC could improve the effectiveness of addressing the state's fuels reduction needs using an enhanced planning process.

DNRC and Local Government Accomplishments

Since the federal government initiated activities to develop a National Fire Plan (NFP) in 2000, DNRC and local governments adapted and responded to changing federal policy to support local fuels reduction activities. Local governments developed working groups to identify funding needs and to apply for federal grants. In response, DNRC established a process for prioritizing local funding requests. These priorities served as the basis for federal funding through Community Protection Fuels Mitigation Grants and Western States Wildland Urban Interface (WUI) Grants.

DNRC's fuels reduction program collaborates with local groups to develop Community Wildfire Protection Plans (CWPPs). These plans identify local wildfire hazards and establish local priorities for fuels reduction activities. To date, 41 of the state's 56 counties have completed a CWPP or are in the process of completing one. DNRC also hosted the March 2006 Montana Communities and Wildfire Conference to discuss the importance of conducting fuels reduction activities to protect Montana's communities. As a result, DNRC is now active in supporting and establishing the Montana Firesafe Council, a fuels reduction information clearinghouse to provide fuels and wildfire prevention information to citizens and local governments.

DNRC also assisted in developing proposed legislation for the 2007 legislative session to guide development in the WUI and to reduce fuels and the effects of wildfires in those areas. The department's Fuels for Schools Program works with local governments and schools to reduce reliance on petroleum fuels by replacing existing

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heating systems with biomass systems. These systems will annually save an estimated \$760,000 and consume 12,800 tons of wood waste, much of which comes from fuels reduction projects.

Fuels Reduction Projects Receive Significant Federal Funding

DNRC's fuels reduction program and local activities on the ground resulted in Montana projects receiving over \$9.3 million in federal fuels reduction funding since 2002. From 2002 to 2006, these grants helped fund 44 fuels reduction activities on 11,263 acres. Support for these local fuels reduction activities, including grant applications, education and prevention, and development of local CWPPs, is provided by a single DNRC fuels coordinator.

Conclusion

DNRC and local governments have made positive strides in reducing hazardous fuels in Montana's forests.

Enhanced Planning Will Focus Fuels Reduction Activities

Because of costs associated with completing fuels reduction projects, the amount of land needing to be treated, and limited availability of funding, there should be a process to ensure the highest priority projects are selected. While DNRC distributed federal funds to support fuels reduction activities around the state, audit work cannot determine if these funds were used on areas with the highest fuels reduction needs. We identified two major changes DNRC can make to its process to improve opportunities for federal funding to support Montana fuels reduction projects. These include:

- ▶ Developing a regional and statewide assessment of hazardous fuel levels.
- ▶ Increasing the use of available internal DNRC information to identify activities influencing fuel conditions to more effectively prioritize fuels reduction programs.

The common thread to these improvements is an enhanced planning process. Improvements require a focused process for identifying fundamental decisions to guide organizational or program goals and objectives. These fundamental decisions are reached after gathering relevant information from a broad range of sources, identifying alternatives to various courses of action, and analyzing future

Chapter III – How Can DNRC Improve on What it is Already Doing?

outcomes resulting from current decisions. A key benefit of enhanced planning is the ability to focus attention on crucial issues and develop a process to justify decisions to fund one project over another.

Developing a Regional and Statewide Assessment of Hazardous Fuel Levels

A necessary step in developing an enhanced fuels reduction plan is to establish an assessment of hazardous fuel levels versus the value of resources to be protected. To accomplish this, several steps should be taken including identifying areas to be targeted and gathering information on local conditions. The following sections discuss each of these steps.

Targeting Identified Risks

Determining where to conduct fuels reduction activities is dependent on identifying where the greatest risk from fuels exists. Identifying where these risks exist requires DNRC to conduct regional and statewide assessments of conditions. There are many resources available from federal, state, and local governments to help DNRC accomplish this task.

In August 2001, the federal government identified 182 communities and geographic locations situated near federal lands at high risk from wildfires. According to the most recently issued State of Montana Multi-Hazard Mitigation Plan and Statewide Hazard Assessment, wildfire is the greatest risk facing the residents and communities of the state. In this plan, DNRC is tasked with developing a consistent statewide fire risk assessment system. However, our audit work did not identify how current fuels reduction activities focus on reducing the risks to these communities. We also found no evidence of a current statewide fire risk assessment system to guide prioritization of fuels reduction activities and corresponding funding.

Incorporating Local Information

Community Wildfire Protection Plans have the potential to provide a wealth of locally-oriented information to DNRC that would be useful for completing regional and statewide fuels assessments and determining where to target fuels reduction activities. Forty-one of the state's 56 counties have completed CWPPs or All-Hazard Mitigation Plans to reduce the risks from wildfires. Local

Chapter III – How Can DNRC Improve on What it is Already Doing?

governments identify what information will be included in their CWPP. The NFP provides broad guidance about the purpose and content of a local CWPP. Although CWPPs are not required to apply for fuels reduction funding, both the federal and DNRC grant award processes give more weight to projects included in local CWPPs.

Improvements are Needed to Make More Effective Use of Local Information

To identify regional risks and conditions accurately, DNRC must be able to compare information from county to county. We reviewed the contents of 22 CWPPs from across the state to gauge the comparability of information. All CWPPs provide basic information on local population and economic characteristics, climatic conditions, fire history, geography, and fire resources. Most provide information about specific fuels and wildfire concerns within the county. However, there was little consistency between plans on how local fuels assessments were made, local land-use planning practices, how much of the county was at risk for wildfires from elevated fuel levels, or action plans (including specific timelines) to mitigate wildfire threats from fuels. This lack of consistency makes it difficult for DNRC to develop a complete picture of regional or statewide fuels conditions and identify the risks those conditions create.

DNRC officials agree with this assessment of inconsistencies in county CWPPs, but indicate they are concerned about adding specific informational burdens on local governments beyond those identified in federal policy. This is because many local governments do not have enough resources to complete CWPPs on their own and rely on contractors to develop the information. However, counties submitting All-Hazard Plans must update those plans every five years and CWPPs should be updated as needed to remain relevant. As plans are regularly updated, improved guidance from DNRC can allow counties to provide more consistent information without incurring additional expense.

Need for Regional and Statewide Assessments of Hazards

There is little assessment of wildfire hazards beyond the county level. Regional and statewide threats result from fuels conditions existing across geographic areas and encompassing multiple governmental entities. For example, wildfires in the Bitterroot Valley

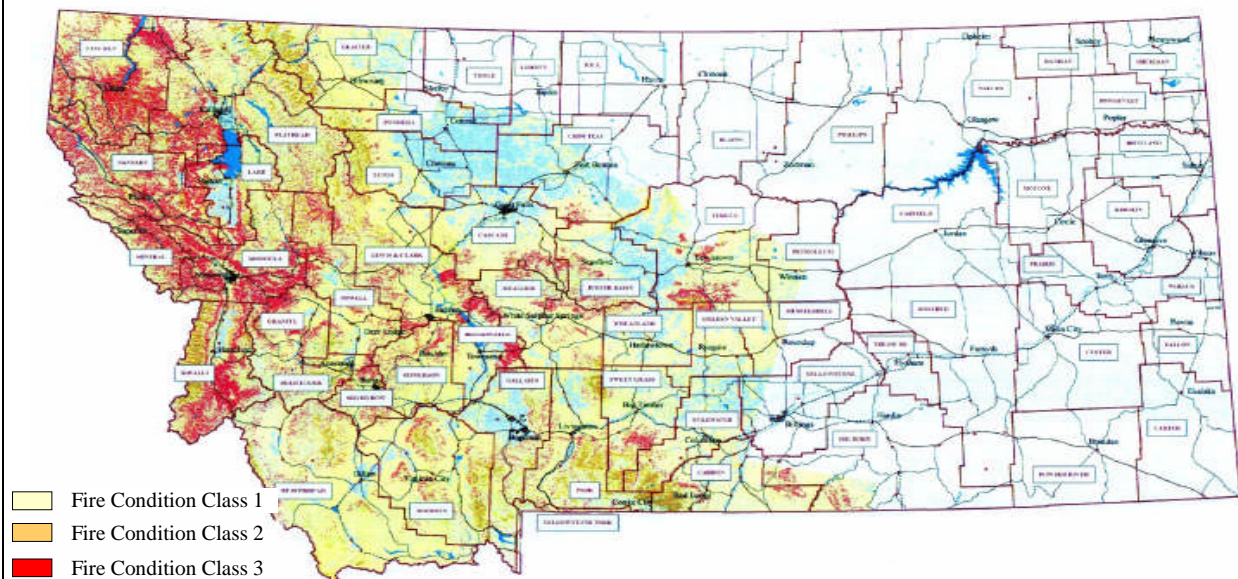
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will not only affect the communities of Ravalli County and the Bitterroot National Forest, but potentially Missoula County and the city of Missoula, Granite County and its communities, Deer Lodge County and its communities, and the Beaverhead-Deerlodge National Forest.

A map of the state's fire condition classifications provides an example of how fuel conditions cross governmental boundaries and affect large areas. Fire condition classifications are based on the length of time between normal wildfires; the longer the time between wildfires, the more fuels are available to support more severe wildfires. Fire Condition Class 1 exists when fire intervals occur at historical intervals and these fires pose little risk to natural resources. A Fire Condition Class 3 generally results in severe, high intensity wildland fires with the potential to kill all vegetation, even large trees which normally survive lower intensity fires. The following figure shows Montana's Fire Condition Classifications with a large portion of the western forests in Fire Condition Class 2 or 3.

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Figure 3
Statewide Fire Condition Classifications



Source: DNRC Conference on, Montana Communities and Wildfire, 2006.

Because DNRC has not identified where the greatest risks exist, its system for prioritizing local fuels reduction applications cannot determine if those priorities target areas with the greatest need. DNRC officials acknowledge they have not completed an assessment of hazardous fuels and the current prioritization process does not focus resources on these areas. This has limited the effectiveness of DNRC's coordination and prioritization of fuels reduction activities.

Conclusion: Area Assessments are Needed

Developing a regional and statewide assessment of hazardous fuel levels is an important step in enhanced fuels reduction planning.

Increasing the Use of Available Information to More Effectively Prioritize Fuel Reduction

While a regional and statewide fuels assessment will identify where conditions present significant risks to resources and values, these risks can be influenced by other activities occurring in the geographic area, such as logging operations or previous wildfires. DNRC's current process sets priorities and distributes funds for fuels reduction applications with limited consideration of other

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environmental conditions or forest activities. Much of this information is already being collected by DNRC but is not used in the current fuels reduction prioritization process or project funding decisions.

As part of the department's daily land management activities, DNRC collects information on a variety of forestry activities useful in setting priorities for fuels reduction projects. This information includes locations of commercial timber harvests, locations and extent of forest insect and disease infestations, and locations of past wildfires to name a few. Information from each of these subjects would have an additive or subtractive influence on the value of an individual fuels reduction project. For example, if a proposed fuels reduction project takes advantage of a previous event such as a past wildfire or a large logging operation, it could have a greater effect on reducing the severity of a future wildfire than a similar project without such an advantage.

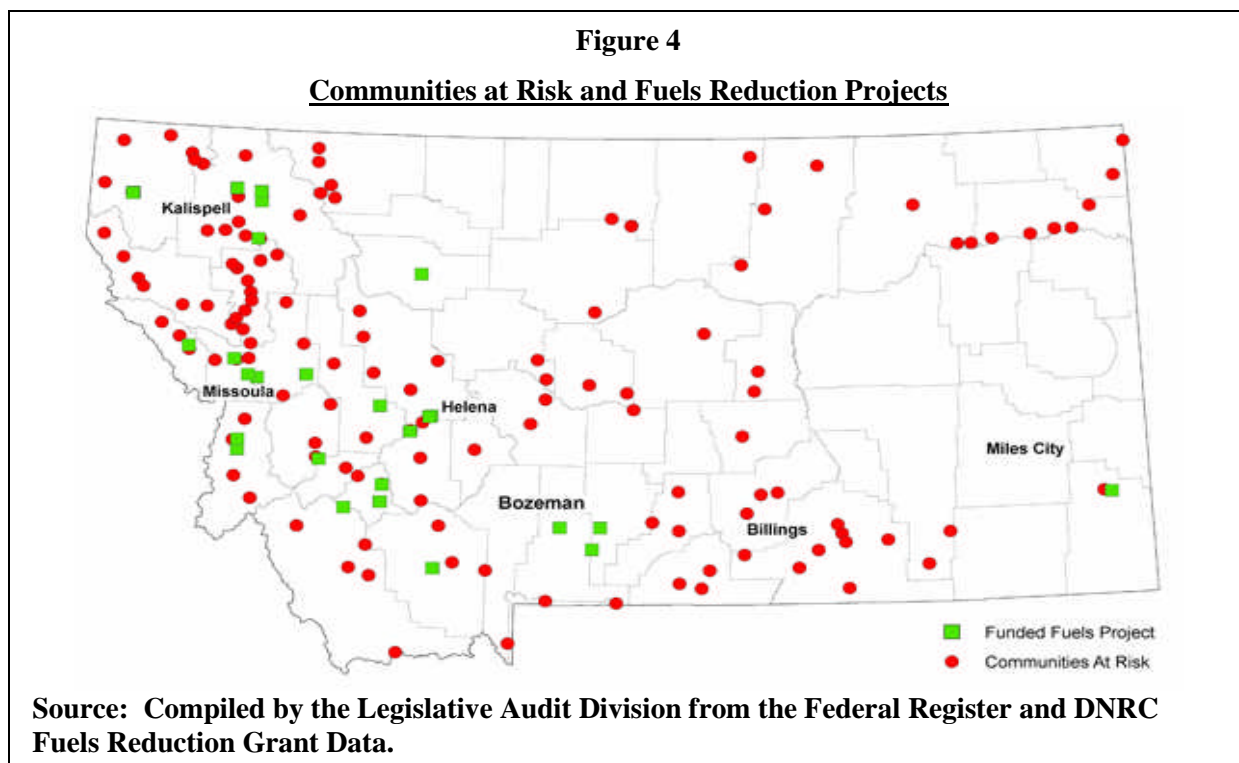
DNRC also has foresters assigned to each area land office who could provide insight into local conditions and activities not currently included in fuels reduction decisions. Discussions with DNRC officials and area land managers confirmed there is limited local DNRC input to fuels reduction project applications during the selection process. Input from DNRC's area land offices could also be used to offset inconsistencies between county CWPPs and allow for more effective decision-making.

Initial Focus was Distribution of Funds Rather Than Targeting Risk

Beginning in 2002, the National Fire Plan began making significant funding available to state and local governments to reduce the effects of wildfires. Recipient states, including Montana, quickly developed programs to help local governments compete for these funds. DNRC developed a process for distributing fuels reduction funds to local projects and helped counties develop plans to guide local activities. This process emphasized distributing funds to as many groups/governments as possible rather than specifically targeting areas of highest risk.

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The following figure identifies the locations of communities at higher risk of wildfires and compares them to areas where fuels reduction grants were awarded.



As the figure shows, fuels reduction funding is scattered throughout the state. The western part of the state received the majority of funding with very little funding going to the eastern part of the state. Based on DNRC information, it appears deserving projects are funded. However, we are unable to determine if past awards would have been more effective if targeted to reduce fuels risks in other areas. This is because decisions are not based on specific statewide fuels reduction goals.

Failure to Target Risks Could Result in Lost Funding

DNRC accomplished a great deal in a short time with little investment of departmental resources. In five years, DNRC assisted local governments in obtaining over \$9 million in federal fuels reduction grants. It helped counties identify local fuel hazards and develop plans to address those hazards. Throughout this period, DNRC had little specific guidance about how to achieve these

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accomplishments. However, the federal government, in response to budgetary limitations and identified weaknesses in its own processes, is changing its own practices and policies. Federal funds are being constricted and awards are tied to greater planning at the state and local levels.

Changes in federal fuels reduction policy are placing more emphasis on the state's ability to enhance fuels reduction planning. States that more effectively plan fuels reduction activities will obtain greater amounts of federal fuels reduction grant money to disburse to local communities. The NFP's original focus was to get money to local governments rather than identify where funding would have the greatest impact. Because federal funds are limited, DNRC will have to change its underlying processes as it competes with other western states for fewer federal dollars. Fewer dollars can be expected and those dollars should be more effectively targeted.

Conclusion: Better Use of Available Information Could Improve Decisions

Using existing information internal to DNRC could improve how decisions are made and which fuels reduction projects are funded to help Montana get more effective use of available fuels reduction funding.

Enhanced Planning Would Put Montana in a Better Position to Obtain Federal Funding

Lack of a focused plan guiding DNRC's fuels reduction activities is not unique. The Government Accountability Office and the U.S. Department of Agriculture's Inspector General both identified the lack of enhanced planning to guide federal fuels reduction efforts as a major weakness of the federal program. We contacted seven other western states and found only Colorado had any significant strategic focus on its fuels reduction activities and that planning is done at the regional level. Implementation of goals and objectives for fuels reduction activities at a regional/statewide level would put Montana in a position to better compete against other western states for reduced federal funds.

Focusing regional/statewide fuels reduction needs and projects will dovetail into federal policy and put Montana in the unique place of managing fuel-related wildfire risks in a way not duplicated by other

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regional competitors. This process would also result in a transparent and defensible prioritization and selection process based on sound analysis of conditions and threats.

For DNRC to improve its fuels reduction planning in the future, it will need to evaluate its existing resources and determine if additional support is needed to complete an enhanced planning process. DNRC has allocated one FTE to complete all fuels reduction activities. The individual assigned these duties is also heavily involved in the department's wildfire suppression program, which affects their ability to work on fuels reduction duties during the wildfire season. Additional resources may be necessary to complete a regional and statewide fuels assessment and develop a strategic plan to guide fuels reduction activities.

Recommendation #1

We recommend DNRC develop criteria to coordinate and fund statewide fuels reduction activities that:

- A. Focuses efforts in areas of greatest risk as identified in regional and statewide fuels assessments.**
- B. Incorporates the use of local land-use planning practices and in-house information.**
- C. Requires the consistency of locally supplied fuels information.**

Department Response

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION



BRIAN SCHWEITZER, GOVERNOR

1625 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
FAX: (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

June 28, 2007

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LEGISLATIVE AUDIT DIV.

Scott A. Seacat, Legislative Auditor
Legislative Audit Division
PO Box 201705
Helena, MT 59620-1705

RE: DNRC Forest Fuels Mitigation Performance Audit

Dear Mr. Seacat:

The Department of Natural Resources and Conservation (DNRC) has reviewed the June 2007 performance audit on DNRC's role in forest fuels reduction activities. Our response to the recommendation is below.

Recommendation

We recommend DNRC develop criteria to coordinate and fund statewide fuels reduction activities that:

- A. Focuses efforts in areas of greatest risk as identified in the regional and statewide fuels assessments.
- B. Incorporates the use of local land-use planning practices and in-house information.
- C. Requires the consistency of locally supplied fuels information.

Response

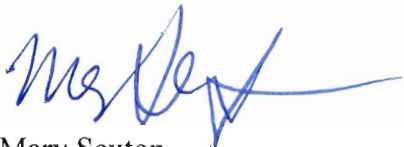
- A. The Department concurs with this recommendation. We agree with a conclusion in the LAD report that developing a high priority fuels treatment assessment is an important step in enhanced fuels reduction planning. The Department will conduct a geospatial assessment to identify high priority areas for fuel mitigation projects on state and private lands, incorporating information from completed CWPPs wherever possible. The assessment will incorporate DNRC area and unit level input and information as well as other publicly available data and will be completed by FY2010. The Department will work to prioritize treatments

in these areas by including this as a scoring criterion in assessing fuels and WUI mitigation grants. Additionally, the overall scoring criteria will be reviewed to ensure that fuel reduction projects are located in areas that leverage other projects and areas where they can have the greatest impact. Finally, the Department will develop a policy for hazardous fuels reduction on state lands.

- B. The Department concurs with this recommendation. We believe this recommendation stems from the discussion in the LAD report (page 15 and 19) on using locally based information, such as contained in CWPPs, and incorporating DNRC area and unit level input in the assessment of high priority fuel mitigation areas. Those information sources will be incorporated into the fuels assessment discussed above.
- C. The Department partially concurs with this recommendation. We agree on the need for consistent fuels and fire risk information. However, CWPP development is a locally controlled process and the Department has no authority to require counties to incorporate fuels and fire risk information or update the plans with more accurate or standardized information. The Department is committed to work towards improving consistency in data collection and reporting.

We appreciate the professionalism demonstrated by your staff that participated in the audit. Thank you again for the opportunity to review the audit report and respond to the recommendation.

Sincerely,



Mary Sexton
Director